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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/713,134	11/14/2003	Katsuyoshi Fujita	5000-5133	9574
27123	7590	12/07/2005	EXAMINER	
MORGAN & FINNEGAN, L.L.P. 3 WORLD FINANCIAL CENTER NEW YORK, NY 10281-2101			SPITZER, ROBERT H	
			ART UNIT	PAPER NUMBER

1724

DATE MAILED: 12/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/713,134

Applicant(s)

FUJITA ET AL.

Examiner

Robert H. Spitzer

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 21 November 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2 and 6 is/are rejected.
- 7) ☒ Claim(s) 3-5 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
2. Claims 1 and 2 are again rejected under 35 U.S.C. 102(b) as being clearly anticipated by the sorber device of Marek (2,450,289), wherein main tank (holder 12) is filled with a solid sorbent powder 13 that is arranged around heat exchange finned tubes 14 and is covered by screens or foraminous plates 15 and 16, which finned tubes 14 have fins 14A that carry heat from a heat transfer material, and would also restrict any movement of the powder sorber material in a parallel direction to such fins because of such parallel construction.
3. Claim 6 is again rejected under 35 U.S.C. 103(a) as being unpatentable over Marek (2,450,289) in view of Klos et al. (6,432,176). The claim differs from the structure of Marek ('289) in the sorbent material being capable of sorbing hydrogen. Klos et al. ('176) show a container containing hydrogen sorbing alloy, with such container including heat exchange means. It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to utilize a hydrogen sorbing material within the container of Marek ('289), in view of the showing of Klos et al. ('176), when it is desired to sorb hydrogen in place of oxygen within the container.
4. Claims 3-5 remain objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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5. Applicant's arguments filed November 21, 2005 have been fully considered but they are not persuasive. With respect to the Marek ('289) reference, applicants argue that such reference fails to "teach, disclose or suggest a sorber device having 'a restricting portion' ", as the finned tubes of Marek ('289) do not allow the sorber material to be maintained thereon because they are of circular cross-section. The examiner disagrees as Fig. 1 of Marek ('289) clearly shows that such fins 14A are of square or rectangular cross-section, which would indeed restrict the flow of the sorber material when such device is placed in the up-right position. Thus, the Marek ('289) reference anticipates such use of "a restricting portion", especially as Figs. 1 and 2 show that there is a screen or foraminous plate 15 and 16, which cover the heat exchange finned tubes 14. With respect to the combination of Marek ('289) and the reference to Klos et al. ('176), as pointed out by applicants the reference to Marek ('289) does indeed show as an example the use of his device for the removal of oxygen, however, both the claims of such reference, that recite "an apparatus for separating a gaseous component from a gaseous mixture" and the specification that states "this invention relates to the separation of gases and more particularly to an apparatus and a process for separation by chemical means of a gaseous component from a gaseous mixture, e. g. of oxygen from air". Thus, the device of Marek ('289) is broadly disclosed for the removal of "a gaseous component from a gaseous mixture". Thus, as Klos et al. ('176) show that a sorber material for sorbing of hydrogen can be placed within a container that also includes a heat exchanger, then the person skilled in this gas sorption art would indeed have found it obvious to provide the container of Marek ('289) with a sorbent for removal

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of hydrogen, if hydrogen were the "gaseous component" to be removed from "a gaseous mixture", and not destroy the intended use or operation of the Marek ('289) sorber device. Any other remarks made by applicants and not specifically commented upon by the examiner, have been considered.

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

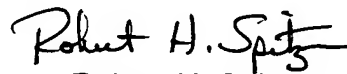
7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert H. Spitzer whose telephone number is (571) 272-1167. The examiner can normally be reached on Monday-Thursday from (5:30AM-4:00PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Duane Smith can be reached on (571) 272-1166. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

December 5, 2005



Robert H. Spitzer  
Primary Examiner  
Art Unit 1724

*December 5, 2005*